

# SEQUENCE LISTING

<110> SUNTORY LIMITED  
<120> Inhibitor and Activator of Coupling Factor-6 and Antigen thereto  
<130> YCT-515  
<140> PCT/JP00/5210  
<141> 2000-08-03  
<150> JPA 264687/99  
<151> 1999-09-17  
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<210> 1  
<211> 76  
<212> PRT  
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Asn Lys Glu Leu Asp Pro Ile Gln Lys Leu

1 5 10

Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser

15 20

Lys Arg Gln Thr Ser Gly Gly Pro Val Asp

25 30

Ala Ser Ser Glu Tyr Gln Gln Glu Leu Glu

35 40

Arg Glu Leu Phe Lys Leu Lys Gln Met Phe

45 50

Gly Asn Ala Asp Met Asn Thr Phe Pro Thr

|   |    |    |
|---|----|----|
|   | 55 | 60 |
| Phe Lys Phe Glu Asp Pro Lys Phe Glu Val |    |    |
|   | 65 | 70 |
| Leu Glu Lys Pro Gln Ala                 |    |    |
|   | 75 |    |

|   |     |    |
|---|-----|----|
| <210>                                   | 2   |    |
| <211>                                   | 76  |    |
| <212>                                   | PRT |    |
| ,<213>                                  | Rat |    |
| <400>                                   | 2   |    |
| Asn Lys Glu Leu Asp Pro Val Gln Lys Leu |     |    |
| 1                                       | 5   | 10 |
| Phe Leu Asp Lys Ile Arg Glu Tyr Lys Ala |     |    |
|   | 15  | 20 |
| Lys Arg Leu Ala Ser Gly Gly Pro Val Asp |     |    |
|   | 25  | 30 |
| Thr Gly Pro Glu Tyr Gln Gln Glu Val Asp |     |    |
|   | 35  | 40 |
| Arg Glu Leu Phe Lys Leu Lys Gln Met Tyr |     |    |
|   | 45  | 50 |
| Gly Lys Gly Glu Met Asp Lys Phe Pro Thr |     |    |
|   | 55  | 60 |
| Phe Asn Phe Glu Asp Pro Lys Phe Glu Val |     |    |
|   | 65  | 70 |
| Leu Asp Lys Pro Gln Ser                 |     |    |
|   | 75  |    |

<210> 3  
 <211> 5  
 <212> PRT  
 <213> Unknown  
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 <223> Enterokinase recognition site  
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Asp Asp Asp Asp Lys

<210> 4  
 <211> 139  
 <212> PRT  
 <213> E. coli  
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Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp  
 1 5 10 15  
 Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro  
 20 25 30  
 Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro Ser  
 35 40 45  
 Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe Pro  
 50 55 60  
 Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Glu Ser Asp Leu Pro Glu  
 65 70 75 80  
 Ala Asp Thr Val Val Val Pro Ser Asn Trp Gln Met His Gly Tyr Asp

|   |     |     |     |
|---|-----|-----|-----|
|   | 85  | 90  | 95  |
| Ala Pro Ile Tyr Thr Asn Val Thr Tyr Pro Ile Thr Val Asn Pro Pro |     |     |     |
|   | 100 | 105 | 110 |
| Phe Val Pro Thr Glu Asn Pro Thr Gly Ser Tyr Ser Leu Thr Phe Asn |     |     |     |
|   | 115 | 120 | 125 |
| Val Asp Glu Ser Trp Leu Gln Glu Gly Gln Thr                     |     |     |     |
| 130   | 135 |     |     |

<210> 5  
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 <212> PRT  
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 <400> 5

|   |    |    |    |
|---|----|----|----|
| Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp |    |    |    |
| 1   | 5  | 10 | 15 |
| Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro |    |    |    |
|   | 20 | 25 | 30 |
| Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp Arg Pro Ser |    |    |    |
|   | 35 | 40 | 45 |
| Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe Ala Trp Phe Pro |    |    |    |
|   | 50 | 55 | 60 |
| Ala Pro Glu Ala Val Pro Asp Ser Leu Leu Asp Ser Asp Leu Pro Glu |    |    |    |
| 65  | 70 | 75 | 80 |
| Ala Asp Thr Val Val Val Pro Ser Asn Trp Gln Met His Gly Tyr Asp |    |    |    |
|   | 85 | 90 | 95 |
| Ala   |    |    |    |

<210> 6  
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<212> DNA  
<213> Artificial Sequence  
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<223> Primer used in PCR method  
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atgactgttc agaggatctt cag

<210> 7  
<211> 27  
<212> DNA  
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<222>  
<223> Primer used in PCR method  
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<210> 8  
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<223> Primer used in PCR method

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<210> 9

<211> 28

<212> DNA

<213> Artificial Sequence

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<223> Primer used in PCR method

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<210> 10

<211> 45

<212> DNA

<213> Artificial Sequence

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<222>

<223> Gene coding for enterokinase recognition site and Eco RI recognition site

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<210> 11

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 <213> rat  
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Cys Phe Pro Thr Phe Asn Phe Glu Asp Pro Lys Phe Glu Val Leu

1 5 10 15

Asp Lys Pro Gln Ser

20

<210> 13  
 <211> 20  
 <212> PRT  
 <213> rat  
 <400> 13

Tyr Phe Pro Thr Phe Asn Phe Glu Asp Pro Lys Phe Glu Val Leu

1 5 10 15

Asp Lys Pro Gln Ser

20

<210> 14  
 <211> 19  
 <212> PRT  
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 <400> 14

Cys Leu Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser Lys Arg Gln

1 5 10 15

Thr Ser Gly Gly

<210> 15  
 <211> 18  
 <212> PRT  
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Leu Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser Lys Arg Gln Thr

1 5 10 15

Ser Gly Gly

<210> 16  
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 <212> PRT  
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 <400> 16

Asn Lys Glu Leu Asp Pro Val Gln Lys Leu Phe Leu Asp Lys Ile

1 5 10 15

Arg Glu Tyr Lys Ala Lys Arg Leu Ala Ser Gly Gly Pro Val Asp

20 25 30



Thr Gly Pro Glu Tyr Gln Gln Glu Val

35

<210> 17

<211> 16

<212> PRT

<213> rat

<400> 17

Asp Arg Glu Leu Phe Lys Leu Lys Gln Met Tyr Gly Lys Gly Glu

1

5

10

15

Met

<210> 18

<211> 9

<212> PRT

<213> rat

<400> 18

Asp Lys Phe Pro Thr Phe Asn Phe Glu

1

5

<210> 19

<211> 7

<212> PRT

<213> rat

<400> 19

Asp Pro Lys Phe Glu Val Leu

1

5

<210> 20  
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<400> 20

Asp Lys Pro Gln Ser

1 5

<210> 21  
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<223> Factor Xa recognition site  
<400> 21

Ile Glu Gly Lys

<210> 22  
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<223> Primer for PCR method

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<210> 23

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<223> Primer for PCR method

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gtcgacttaggactggggtttgtcga

<210> 24

<211> 8

<212> PRT

<213> Artificial Sequence

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<223> Factor Xa recognition site containig peptide

<400> 24

Glu Phe Gly Leu Ile Glu Gly Lys

1

5

<110> Asanai, Tomohiro  
 Magota, Koji  
 <120> Inhibitor and Activator of Coupling Factor-6 and Antigen thereto  
 <130> 46220  
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 <141> 2001-05-16  
 <151> JPA 264687/99  
 <151> 1999-09-17  
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<210> 1  
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 Asn Lys Glu Leu Asp Pro Ile Gln Lys Leu  
 1 5 10  
 Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser  
 15 20  
 Lys Arg Gln Thr Ser Gly Gly Pro Val Asp  
 25 30  
 Ala Ser Ser Glu Tyr Gln Gln Glu Leu Glu  
 35 40  
 Arg Glu Leu Phe Lys Leu Lys Gln Met Phe  
 45 50  
 Gly Asn Ala Asp Met Asn Thr Phe Pro Thr  
 55 60  
 Phe Lys Phe Glu Asp Pro Lys Phe Glu Val  
 65 70  
 Leu Glu Lys Pro Gln Ala  
 75

<210> 2  
 <211> 76  
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 Phe Leu Asp Lys Ile Arg Glu Tyr Lys Ala  
 15 20  
 Lys Arg Leu Ala Ser Gly Gly Pro Val Asp  
 25 30  
 Thr Gly Pro Glu Tyr Gln Gln Glu Val Asp  
 35 40  
 Arg Glu Leu Phe Lys Leu Lys Gln Met Tyr  
 45 50  
 Gly Lys Gly Glu Met Asp Lys Phe Pro Thr  
 55 60  
 Phe Asn Phe Glu Asp Pro Lys Phe Glu Val  
 65 70  
 Leu Asp Lys Pro Gln Ser  
 75

<210> 3  
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 Asp Asp Asp Asp Lys

<210> 4  
 <211> 139  
 <212> PRT  
 <213> E. coli  
 <400> 4  
 Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Arg Asp  
 1 5 10 15  
 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His  
 20 25 30  
 Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala Arg Thr Asp  
 35 40 45  
 Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe  
 50 55 60  
 Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Glu Ser Leu Leu Glu  
 65 70 75  
 Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn Trp  
 80 85 90  
 Gln Met His Gly Tyr Asp Ala Pro Ile Tyr Thr Asn Val Thr Tyr  
 95 100 105  
 Pro Ile Thr Val Asn Pro Pro Phe Val Pro Thr Glu Asn Pro Thr  
 110 115 120  
 Gly Ser Tyr Ser Leu Thr Phe Asn Val Asp Glu Ser Trp Leu Gln  
 125 130 135  
 Glu Gly Gln Thr

<210> 5  
 <211> 97  
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 <400> 5  
 Thr Met Ile Thr Asp Ser Leu Ala Val Val Leu Gln Arg Arg Asp  
 1 5 10 15  
 Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His  
 20 25 30  
 Pro Pro Phe Ala Ser Trp Arg Asn Ser Asp Asp Ala Arg Thr Asp  
 35 40 45  
 Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Arg Phe  
 50 55 60  
 Ala Trp Phe Pro Ala Pro Glu Ala Val Pro Asp Ser Leu Leu Asp  
 65 70 75  
 Ser Asp Leu Pro Glu Ala Asp Thr Val Val Val Pro Ser Asn Trp  
 80 85 90  
 Gln Met His Gly Tyr Asp Ala  
 95

<210> 6  
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• 42228  
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• 42228 6  
atgattgttc agaggatctt cag

• 42229 7  
• 42229 27  
• 42229 DNA  
• 42229 Artificial Sequence

• 42230  
• 42230  
• 42230  
• 42230 Primer used in PCR method  
• 42230 7  
gttgactcag gactgggggtt tgtcgag

• 42231 8  
• 42231 13  
• 42231 DNA  
• 42231 Artificial Sequence  
• 42232  
• 42232  
• 42232  
• 42232 Primer used in PCR method  
• 42232 7  
atgattgttc agaggctctt cag

• 42233 9  
• 42233 18  
• 42233 DNA  
• 42233 Artificial Sequence  
• 42234  
• 42234  
• 42234  
• 42234 Primer used in PCR method  
• 42234 9  
gttgactcag gactgggggtt ttctgatg

• 42235 10  
• 42235 45  
• 42235 DNA  
• 42235 Artificial Sequence  
• 42236  
• 42236  
• 42236  
• 42236 Gene coding for enterokinase recognition site and Eco RI recognition  
site  
• 42236 10  
gaattcgag atgacgataa gaataaggaa cttgatcctg tacag

• 42237 11  
• 42237 46  
• 42237 DNA  
• 42237 Artificial Sequence  
• 42238  
• 42238

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<223> Gene coding for enterokinase recognition site and Eco RI recognition site

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gaattcgacg atgacgataa gaataaggaa ctgataccta tacaga

<21> 12

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<21> PRT

<21> rat

<40> 12

Lys Phe Pro Thr Phe Asn Phe Glu Asp Pro Lys Phe Glu Val Leu  
1 5 10 15

Asp Lys Pro Gln Ser  
20

<21> 13

<211> 2

<21> PRT

<21> rat

<40> 13

Lys Phe Pro Thr Phe Asn Phe Glu Asp Pro Lys Phe Glu Val Leu  
1 5 10 15

Asp Lys Pro Gln Ser  
20

<212> 14

<211> 13

<212> PPT

<212> human

<40> 14

Lys Leu Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser Lys Arg Gln  
1 5 10 15

Thr Ser Gly Gly

<212> 15

<211> 14

<212> PPT

<212> human

<40> 15

Leu Phe Val Asp Lys Ile Arg Glu Tyr Lys Ser Lys Arg Gln Thr  
1 5 10 15

Ser Gly Gly

<212> 16

<211> 34

<212> PPT

<212> rat

<40> 16

Asn Lys Glu Leu Asp Pro Val Gln Lys Leu Phe Leu Asp Lys Ile  
1 5 10 15

Arg Glu Tyr Lys Ala Lys Arg Leu Ala Ser Gly Gly Pro Val Asp  
20 25 30

Thr Gly Pro Glu Tyr Gln Gln Glu Val  
35





<210> 23  
 <211> 26  
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 <223> Primer for PCR method  
 <400> 23  
 gtagcttaggactgggttagtga

<210> 24  
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 <212> PRT  
 <213> Artificial Sequence  
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 <223> Factor Xa recognition site containing peptide  
 <400> 24  
 Glu Phe Gly Leu Ile Glu Gly Lys  
 1 5